

Course Portfolio

Excel Essentials

This is the basic/introductory level of MS Excel. It will introduce participants to basic formulas and formatting techniques in Excel, to create basic reports that usually do not involve large and varied data sets. You will also learn charting and printing principles.

Intermediate Excel

If you have not come across functions such as VLOOKUP, Pivot Tables, or even the ability to manipulate dates and text strings in Excel, this course is a fit for you. The concepts addressed here aim at increasing your productivity and efficiency and as a result, countless hours are saved.

Advanced Excel

In this course, you will learn how to handle huge data sets using formulas such as INDEX, SUMIFS, Advanced Pivot Tables, and interactively present reports using Advanced (non-standard) Excel charts. Learners also gain skills to combine and nest various Excel formulas for flexibility.

Data Analysis & Visualization (Dashboard Reporting) in Excel

This advanced course equips you with skills to create visually rich, interactive and insightful one pager reports (Dashboards). This helps in presenting and tracking KPIs and other metrics relevant to the organisation that smoothen the process of decision making. The learner is expected to be conversant with Intermediate Excel concepts such as VLOOKUP, Pivot tables and charts.

Report Automation (VBA/Macros) in Excel

Preparation and analysis of data can be time consuming! Imagine having to, for instance, consolidate over 30 files into one master, and then analyze to give reports -how long would it take? This course is built with these scenarios in mind. It gives you the potential to reduce a 3 days' workload to a 10 minutes' task.

The learning curve is however steep and the learner is expected to at least be an Intermediate Excel user (see *the outline below*) to cope.

Data Analysis & Visualization in Power BI and Power Pivot

This course covers all necessary topics needed to connect/import and integrate data (usually millions of rows) from multiple sources, generate a useful data model and publish functional dashboards to the cloud/online.

Are you tired of heavy Excel files and broken links? Are you interested with real-time reports, available even on your mobile device, anywhere? This course enables you to gain visibility into the core business metrics giving your company a competitive edge!

Advanced PowerPoint

The course aims at enabling you to leverage on available techniques in MS PowerPoint that moves a presentation from a boring to an amazing one. Sifting data coming from Excel into compelling data stories using visuals, key presentation shortcuts, creative use of animations and working with shapes to enhance communication are some of the deliverables.

Advanced MS Project

The participants are taught different ways of monitoring and evaluating a project through use of Gantt charts and other ways of capturing milestones in projects being undertaken. Also, smartest ways of calculating project cost and duration with emphasis on critical activities.



Excel Essentials (2 Days)

Get a solid foundation and prepare yourself for bigger tasks as an analyst.

Target Group:

Designed for those who are relatively new to Excel and who maintain data and perform regular analysis on information such as petty cash management, accounting for travel disbursements and reimbursements, tracking product sales, vehicle service monitoring and reporting, etc.

Course Aims:

This course addresses the basic, but core fundamentals of MS Excel as a tool for performing basic analysis on data and presenting it in a visually appealing look to the reader both on screen and on hard copy printout.

Expected Outcome:

Participants are expected to be able to:

- (i) Apply and differentiate between the various ways of cell-referencing
- (ii) Use basic formulas to calculate basic summaries
- (iii) Prepare reports for printing in Excel
- (iv) Choose the appropriate chart among alternatives and integrate charts in their reports

Course outline:

- Understanding the MS Excel environment (Quick Access Tools, The Ribbon, etc.);
- Using the dollar sign **-\$-** to create robust formulas (relative, absolute, and mixed references);
- Named Ranges
- Calculating summaries using formulas:
 - *SUM, AVERAGE, COUNT, COUNTA, MAX, MIN, ROUND, IF;*
- Manipulating data lists:
 - *Sorting & Filtering data; Find & Replace; Freezing panes to show important data while scrolling; adding comments; Text-to-column feature;*
- Formatting basics:
 - *applying borders, colour & number formats, save time using the **Format painter** to replicate formatting, Remove gridlines etc.*
 - *Reporting using Excel tables; Grouping Feature in Excel*
- Selecting special types of cells using Go-to Special [**Fill in blanks, visible cells only**, etc.];
- Useful shortcuts to improve productivity (CTRL+B, CTRL+Z, CTRL+Y, CTRL+U, CTRL+T, CTRL+1, etc.);
- Useful Paste-Special features (**Formats, Formula, Value, Transpose**, etc.);
- Working with charts:
 - *Selecting right chart; Chart examples -column, bar, line; Customizing chart elements, Charts dos and don'ts, etc.*
- Prepare worksheet for printing (**margins, page breaks, print area, printing headings on each page**);



Intermediate Excel (2 Days)

Become more effective in your reporting processes. Gain useful data manipulation skills!

Target Group:

This course is tailored for participants who perform regular analysis on business information like product/service performance, operational expenses, payroll/wage processing, bank reconciliations, tracking employees' info, etc. and expect exceptional figures and trends to be easily spotted as a basis for decisions (e.g. overdue invoices, sales over target, missing/repeated records etc.).

Course Aims:

This course addresses **intermediate** skills that expose the learner to data mining techniques that save countless hours.

Expected Outcome:

Participants are expected to be able to:

- (i) Use various techniques such as VLOOKUP and TEXT functions to manipulate data
- (ii) Present data summaries (reports) visually through charts and conditional formatting
- (iii) Use Pivot Tables to summarize large volumes of data

Pre-requisites:

Delegates need to have good grounding on [Excel Essentials](#) concepts.

Course outline:

Key areas covered on the course include:

- Revisiting the use of \$ for Cell referencing (locking formulas);
- Excel features to make powerful charts:
 - *Creating dual-axis and/or combination charts; Modifying the axis to display units in Millions/Thousands; Adding graphics; Non-standard charts -Pareto chart; Dynamic charts using Excel tables*
- Testing specified conditions using logical functions (**IF, Nested-IF and Ageing analysis**);
- Handling genuine errors result by use of **IFERROR, ISERROR**;
- Importing data into Excel [from **Text, Access**];
- Using Text functions (**LEFT, RIGHT, TRIM, CONCATENATE**, etc.) to return the number of specified characters from a given text or join two/more text strings; Using the **Flash-Fill** feature;
- Retrieving and reconciling data made easier by use of **VLOOKUP, HLOOKUP**;
- Manipulating dates (**MONTH, TODAY, WORKDAY, YEAR, DATE** etc.);
- Control user input in a worksheet using **Data Validation** (drop-down lists, dates validation, etc.);
- Securing your data (**Locking Cells, Sheet & Workbook protection, tracking changes** etc.);
- Apply cell formatting using **inbuilt Conditional Formatting**:
 - *Highlight duplicate/unique values; Highlight records based on progress/status, e.g. Amber for In-Progress, Red for On-Hold & Green for Completed; Using data bars as in-cell charts to compare values; Track progress towards a goal using icon-sets, etc.)*
- Consolidating data from multiple worksheets (by **Position**, by **Category**, using a **Formula**);
- Summarising data using **PIVOT-TABLES** (Intro), **SUMIF** & **Subtotal** feature;
- Useful data cleansing processes (**Comparing lists, Identify & Remove Duplicates**);



Advanced Excel (2 Days)

Gain the skills to analyze and visualize data like a professional and bring efficiency in your reporting processes

Target Group:

This course is tailored for those faced with the task of analysing large, and usually unstructured data sets to provide useful insights for decision making. It is for experienced Excel users tired of VLOOKUP short-comings while consolidating data and are looking for flexible methodologies to analyse, visualize and present reports.

Managers and Executives who have to manage, analyse and prepare reports for managerial discussions will find this course most beneficial.

Course Aims:

Apart from learning the advanced formulas, we will equip you with the know how to debug and audit those formulas as well as how to use which formula for which occasion (and also know few alternatives for any given formula problem).

Expected Outcome:

Participants are expected to be able to:

- (i) Apply advanced lookups on data extracted from external sources
- (ii) Use advanced techniques for report visualizations
- (iii) Leverage on various methodologies of summarizing data
- (iv) Understand and apply basic principles of laying out Excel models for decision making

Designed for:

- Regular Excel users competent with our **Intermediate Excel** concepts. If VLOOKUP is new to you, this course is not for you!

Methodology

Experiential learning approach is adopted for this course with practical demonstrations in every concept covered. The course is interactive with hands-on working sessions throughout the training.

Course Outline:

Advanced Data Manipulation Techniques

- ▶ Avoid typing a column index number in vlookup by combining **VLOOKUP + MATCH** functions
- ▶ Say good-bye to VLOOKUP and hello to **INDEX + MATCH** for two-way (matrix) lookups, as well as a right-to-left lookup
- ▶ Working with **TEXT** functions –extract characters from a string, split up one field (e.g. an account code) into several fields; convert improper dates to proper dates in Excel

Methods of Summarizing Data

- ▶ Conditional summing/counting/averaging with multiple criteria
 - **SUMIFS, COUNTIFS & AVERAGEIFS**
- ▶ Maximizing on the power of **PIVOT-TABLES**:
 - Interactive filters using **Slicers** and **Timelines**
 - Change the calculation & display options –e.g. show as %, running totals
 - **Group dates** into months and quarters with a single mouse click
 - Show **top views**, i.e. top/bottom performing products / sales agents / customers
 - Build a simple but **interactive dashboard** using pivots

Visual Reporting & Interaction



- ▶ Make reports more insightful with **formula-driven Conditional Formatting**
 - Track performance towards a goal (green for good, amber for average and red for poor)
 - Highlight entire row based on a single value
 - Highlight upcoming due dates or overdue bills/premiums
- ▶ **Sparklines** to show trends
- ▶ Combine **SUMIFS** with **pick lists**, for data slicing and creating interactive charts
- ▶ Introduction to form controls (**option buttons** for report interaction)

Sensitivity Analysis & Modeling in Excel

- ▶ Sensitivity ("What-if") analysis on models using **Data Tables, Goal Seek**;
- ▶ Laying out a model in Excel (**Budget Model** case study)
 - Model design and structure –the considerations
 - Useful Excel features & techniques -Named Ranges, Conditional Formatting, Validation, **MOD** function for patterns, using **CUMPRINC** & **CUMIPMT**, etc.
 - Step by step model construction
 - Incorporating sensitivity analysis in a model



Data Analysis & Visualization (Dashboard Reporting in Excel) - 3 Days

Connect, Integrate, Analyze and Visualize Data like a pro!

Target Group:

In today's fast-paced business environment, it is vital that decisions are made quickly and accurately. The value of MS Excel as a tool for assisting in the management decision making process is undisputed.

This course is targeted towards **middle-level to senior managers/executives** willing to learn advanced techniques to convert data into actionable information.

Course Aims:

The course aims at exposing how one can use the most available tool, MS Excel, to create and present key information through the use of high-impact, meaningful and appealing reporting solutions (**dashboards**) to facilitate **data-driven insights** for quick decision making.

Expected Outcome:

Delegates are expected to be able to:

- (v) Understand the basic considerations for dashboard design in Excel
- (vi) Use Excel features and formulas to implement a sample dashboard from scratch
- (vii) Be savvy in report visualization
- (viii) Have improved turn-around time in decision making

Designed for:

Regular Excel users competent with our **Intermediate Excel** concepts. If VLOOKUP is new to you, this course is not for you! **This course is not suitable for Absolute Beginners in Microsoft Excel.**

Methodology

- Experiential learning approach
- Interactive hands-on working sessions throughout the training

Course Outline:

Session 1: Overview of Excel Dashboards

- ✓ What is it? What value do you gain from Dashboards?
- ✓ Dashboard Design Principles -what do you need to know?
- ✓ Components of a Dashboard
- ✓ Excel Dashboards Product Demo

Session 2: Prepping your data for analysis

- ✓ Cleaning your data -how do you fill blanks? Check your data for duplicates
- ✓ Applying DATE & TEXT functions to generate extra columns for analysis
- ✓ Incorporate new data automatically -Excel Tables
- ✓ Combining MATCH function with VLOOKUP and INDEX functions for dynamic advanced lookups. Combine data from various sources in style

Session 3: Data Analysis -Part 1

- ✓ Build robust formulas -correctly apply \$ sign to lock formulas
- ✓ SUMIFS & COUNTIFS -your friends for dynamic analytics



- ✓ Top / Bottom views -combine RANK, SMALL, LARGE, IF and Option Buttons or Slicers to swap between top and bottom
- ✓ Named Ranges & Data Validation
- ✓ Conditional Formatting -predefined & formula-based rules
- ✓ Custom number formats -display "3,873,452 as 3.87 Million"

Session 4: Data Analysis -Part 2: Maximizing on Pivot Tables

- ✓ Converting to Percentages
- ✓ Grouping data fields (Dates)
- ✓ Viewing Top/Bottom items (or Top/Bottom 10%)
- ✓ Connecting different reports to a single slicer -make interactive dashboards
- ✓ How do you make a slicer static? We'll show you

Session 5: Advanced Charting Techniques

- ✓ How to select the right chart for your data; Charts dos and don'ts
- ✓ Editing and customizing chart elements e.g. show vertical axis in millions
- ✓ Combination (dual axis) charts
- ✓ Charting with dynamic ranges
- ✓ Linking title text to a cell
- ✓ Analytical charts -Pareto chart, Gauge chart, Waterfall chart etc.
- ✓ Scrolling charts -show 6 or 12 items / data points at a go

Session 6: Adding Interactivity (Making Dashboards Dynamic)

- ✓ Drop-down (Pick) lists with charts
- ✓ Adding Interactivity with Form Controls (Option buttons, Combo boxes, Scroll bars, Spin Buttons)
- ✓ Building Navigation Buttons -hyperlinks
- ✓ Excel Camera tool / Picture Links
- ✓ Using shapes for stylish dashboards -linking shapes to your analysis

Session 7: Final Project

At this stage we have done the analytics; We need to knit this in one pager:

- ✓ Setting up the dashboard layout
- ✓ Assembling a complete management dashboard (e.g. Sales)



Report Automation in Excel (VBA) - 3 Days

Get ahead of others! Automate the mundane tasks and create stunning reports with greater flexibility

Target Group:

This course is designed for users who have leveraged on the rich set of features in the standard Excel user interface BUT are looking for an **easier and faster way** to perform mundane, repetitive data manipulation, analysis and reporting processes. By using Excel VBA for **automation**, you can significantly cut down the time you spend repeating these steps and improve your overall productivity. Further you can use VBA to **build new capabilities into Excel** for enhanced data visualization and building professional dashboards and interfaces.

Course Aims:

The course addresses **Expert** skills in using MS Excel in the development of automated executive information systems that are easy to use and have minimal repetitive mundane steps for users.

Expected Outcome:

Participants are expected to be able to:

- (i) Create usable macros using VBA language on the VB Editor
- (ii) Use VBA to automate report generation processes

Pre-requisites:

Ideal candidates for this module need to be thorough with concepts covered in our [Advanced Excel](#).

Course Outline:

Report Automation in Excel (VBA) - 18 hours	
<p>Getting started with VBA Programming</p> <ul style="list-style-type: none"> • Recording, Storing a macro • Using VB Editor • Understanding data types • Code presentation • Working with Message and Input Boxes • Difference between a sub routine and a function, with examples <p>Working with Variables, Constants and Arrays</p> <ul style="list-style-type: none"> • Declaring variables and constants • Scope of variable/constant • Declaring, assigning and using an array • Illustration: Using variables, constants and arrays <p>The Excel Objects Framework</p> <ul style="list-style-type: none"> • Properties and methods • Object Hierarchy & Collections <p>Controlling Program Flow and Decisions</p> <ul style="list-style-type: none"> • Applications of Excel VBA Control Statements <ul style="list-style-type: none"> ✓ <i>If...Then Statement</i> to conditionally perform a group of tasks ✓ Execute tasks a specific number of times -the <i>For Loop</i> ✓ Using <i>Do While</i> loop ✓ Perform multiple tasks until a condition is met -<i>Do Until</i> ✓ Execute an action based upon a value -<i>Select Case</i> • Exiting control structures 	<p>Working with Ranges and/or Cells</p> <ul style="list-style-type: none"> • Defining a range/cell • The Range and the Cell property • The offset property of a Range • Using Rows and Columns • Reading values from one cell to another or to a variable <p>Working with other workbooks and files</p> <ul style="list-style-type: none"> • Referencing workbooks and worksheets • Get the path and full name • Importing sheets/data • Automate copying ranges from different workbooks to a summary sheet • Using the Browse Option to open a file <p>Automation Using Events, With Examples</p> <ul style="list-style-type: none"> • Understanding event handlers • Workbook, worksheet and chart events • Illustrations of Events <p>Forms and Controls</p> <ul style="list-style-type: none"> • Creating customized dialog boxes (Userforms) and adding controls • Launch and close a userform • Assigning codes to userform controls <p>Error Handling and Macro Debugging</p> <ul style="list-style-type: none"> • Common errors and how to troubleshoot • On Error GoTo • On Error Resume Next



Data Analysis and Visualization in Power BI - 3 Days

Connect, Integrate, Model and Visualize Business Data Reliably!

Designed for:

Those looking for a way to unify various data sources (usually with millions of rows) and create measures that can give a single source of truth of the business health -all in a familiar environment, MS Excel. Suitable for Advanced Excel users: *MIS Executives, Business Analysts, Chief Information/Technology Officers*, etc.

Course Aims:

The course aims at giving you control over your data. You'll learn how to integrate a wide variety of data sources, shape the data and visualize in a drag and drop environment.

Expected Outcome:

Delegates are expected to be able to:

- (i) Understand table relationships and how to create data models
- (ii) Learn and apply must-know Data Analysis Expressions (DAX) to create measures in the Power Pivot window
- (iii) Work with modern data visuals/charts

Methodology

- Experiential learning approach
- Interactive hands-on working sessions throughout the training

Course Outline:

Session 1: Getting Started

- ✓ Enabling Power Pivot
- ✓ Differences between Excel and Power Pivot
- ✓ Advantages of Power Pivot for data analysis (Multiple tables & volumes)
- ✓ Quick demos

Session 2: Understanding the Power Pivot Data Model

- ✓ Importing data from various sources
- ✓ Practice creating a data model
 - Linked tables from within same workbook
 - Get external data from an enterprise database
 - Using online data (from Azure Marketplace, Wikipedia, Facebook, etc.)
- ✓ Introduction to columnar table relationships
- ✓ Understanding differences between measures and calculated columns
- ✓ The Query Editor -Tidying up the data model -number formatting, hiding tables and columns

Session 3: Must-Know DAX Functions to Perform Calculations

- ✓ Using the all-time powerful CALCULATE function
- ✓ Understanding the Context concept in calculations (Row and Filter Context)
- ✓ The "X" functions
- ✓ The Calendar/Date table



- ✓ Time intelligence functions and their applications
 - Concept and best practices
 - Computing month-to-date, quarter-to-date and year-to-date
 - Shifting (e.g. go back 2 years) from the set of dates that are in the current context to a new set of dates using DATEADD, DATESINPERIOD, etc.
 - Year over Year Growth and Variances
 - functions that evaluate an expression over a specified time period -TOTALMTD, TOTALQTD, TOTALYTD
- ✓ Other useful DAX functions: DIVIDE, BLANK, FORMAT, DISTINCT COUNT, COUNTROWS, SWITCH

Session 4: Creating Sample Reports

- ✓ The Report Canvas
- ✓ Modern visuals: waterfall, gauge, tree-map, maps, cards
- ✓ Working with Power View in Excel 2013 Professional Plus and higher versions
- ✓ Adding interaction using slicers
- ✓ Cross-filtering among visuals

Session 4: Report Distribution

- ✓ Uploading data/report to Power BI cloud
- ✓ Creating a dashboard through pinning and Q&A
- ✓ Sharing and Mobility



Advanced PowerPoint (1 Day)

For professional, engaging presentations that gets results

Designed for:

Those looking for something beyond the "click here" PowerPoint training. If you want to create impactful presentations that don't bore the audience, then this course is for you.

Course Aims:

Learn how to tell a compelling story with your PowerPoint presentations. From content to structure to design, we will show you the techniques and shortcuts that will leave your audience looking for your next presentation.

Course Outline:

- The fundamentals -Effective use of fonts, colours and templates; working with custom backgrounds; stick to the rules -we will let you know!
- **Speed boosters**
 - Effective shortcuts that you wish you knew before; quick access toolbar;
 - Working with slide masters for corporate branded ppt & time saving techniques
 - Faster ways to copy paste and align shapes
- **Creative presentations** (strategies to reduce text overload)
 - Project timelines
 - Creating infographic icons in PowerPoint
 - Non-standard charts and how to create them
 - Working with charts, shapes and SmartArt graphics
 - Using special fonts
- Importing and linking data from **Excel**;
- **Use animations creatively** in a corporate context -learn these 3 tricks
 - Draw attention using fades
 - The tray-look to make the most important content to stand out
 - Merging charts
- Working with multimedia (**Video & Sound Clips, Recording**);
- Navigation techniques (**Hyperlinks** and **Action Buttons**);
- Delivering a Presentation
 - Using Presenter View & Presenter Notes; Custom Shows
- Distributing a presentation (**Saving in different formats, PDF outputs**);
- Sample slide makeovers



Advanced MS Project (2 Days)

Scope

1. Define project scope and key milestones
 - a. Generate WBS using top-level items (group work)
 - b. Outline milestones (group work)
 - c. Define main activities (group work)
2. Creating a Project Plan
 - a. Create the Project Plan in MS Project and assign a Project Calendar
 - b. Add tasks to the Project Plan (refer to step 1.c above)
 - c. Enter the task Duration Estimates
3. Managing Tasks in a Project Plan
 - a. Outline Tasks
 - b. Link Dependant Tasks
 - c. Set Task constraints and deadlines
 - d. Add Notes to a Task
 - e. Add a Recurring Task
4. Managing Resources in a Project Plan
 - a. Add resources to the project file
 - b. Enter cost of resources
 - c. Create a resource calendar
 - d. Assign Resources to Tasks
 - e. Enter values for budget resources
 - f. Resolve resource conflicts
5. Finalizing the Project Plan
 - a. Shorten the Project Duration using Critical Path
 - b. Set a Baseline
 - c. Print a Project Summary Report
6. Updating a Project Plan
 - a. Enter Task Progress and compare to baseline
 - b. Split a Task
 - c. Reschedule a Task
 - d. Filter Tasks
7. Managing project costs
 - a. Update Cost Rate Tables
 - b. Group costs